

California Climate Adaptation Strategy

CAT Public Health Work Group
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Today's Goals

- ▣ Overview of CAS and PH chapter
- ▣ Your comments
- ▣ Next steps

What is adaptation?

- ▣ Efforts to respond to the impacts of climate change
- ▣ Adjustments in natural or human systems to actual or expected climate changes
- ▣ Goals
 - minimize harm
 - take advantage of beneficial opportunities.

Mitigation and adaptation

- ▣ Mitigation: slow & reduce magnitude of climate change (reduce GHG emissions)
- ▣ Without mitigation, adaptation capacity will be overwhelmed
- ▣ BOTH ARE NECESSARY

Complementary and Conflicting Adaptation and Mitigation Actions

Complementary and Conflicting Adaptation and Mitigation Actions			
Favorable Actions		Unfavorable Actions	
Favorable for Adaptation and Mitigation Efforts	Favorable for Mitigation, but Unfavorable for Adaptation Efforts	Favorable for Adaptation, but Unfavorable for Mitigation Efforts	Unfavorable for Adaptation and Mitigation Efforts
<ul style="list-style-type: none"> • Energy Demand Management • Energy Efficient Buildings • Water Conservation • Biodiversity-Oriented Forestry • "Smart Growth" • Development in Cooler Regions 	<ul style="list-style-type: none"> • Forestry with Non-Native Species • Urban Forestry (shade trees) with High Water Demand • Some Biofuels Production 	<ul style="list-style-type: none"> • Meeting Peak Energy Demand with Fossil Fuels • Wastewater Recycling and Desalination • Groundwater Banking • Increased Air Conditioner Use • Use of Drainage Pumps in Low Lying Areas 	<ul style="list-style-type: none"> • Development in Floodplains • Traditional "Sprawl" Development • Development in Hotter Regions

Source: Beddoworth and Hanak (2008) - Reprinted with Permission by Authors

Adaptation approaches

- ▣ Hazards based
 - Identify amount and nature of projected climate changes
 - Assess consequences for specific sectors & environments
- ▣ Vulnerability based
 - Assess natural or human system's ability to cope with and adapt to change
 - Focus on socioeconomic and ecological factors that influence vulnerability, ability to adapt
- ▣ BOTH ARE NECESSARY

Critical factors in adaptation

- ▣ Baseline & projected resources
 - economic, technologies, infrastructure, institutional support, access to information
- ▣ Public awareness & engagement
- ▣ Effective governance
- ▣ Sustainably-managed natural resources
- ▣ Equity in access to resources

Public Health Chapter

- ▣ Climate change impacts on health
 - Heat, air quality, extreme weather events, drought, wildfires, sea level rise, infectious disease, vector/water/food-borne diseases
- ▣ Promote community resilience
 - Working group to promote PH considerations in land use/transportation
 - Food security and quality: work with NGOs to promote access to healthy foods
 - Health care access
 - Reduce heat islands

Public Health Chapter ⁽²⁾

- ▣ Educate, empower, engage
 - Educational outreach and materials
 - Education re: risk reduction
 - Education re: mitigation & adaptation
 - Occupational safety standards (heat)
 - Training of health professionals
 - Integration of mental health services in disaster response

Public Health Chapter ⁽³⁾

- ▣ Promote mitigation & adaptation strategies with public health co-benefits
 - Identify strategies with co-benefits
 - Health Impact Assessments

Public Health Chapter ⁽⁴⁾

- ▣ Robust, rapid surveillance
 - Environmental conditions, climate-related illness, vulnerabilities, protective factors, adaptive capacities
 - Implement CSTE indicator set
 - Bio-monitoring
 - Detailed vulnerability assessment
 - Electronic surveillance systems
 - Health information systems (Rapid Response Registry)
 - Water accessibility information
 - Infectious disease monitoring
 - Electronic surveillance systems
 - Emergency monitoring
 - Health information exchange

Public Health Chapter ⁽⁵⁾

- ▣ Improve PH preparedness, emergency response
 - PH advisories re climate-related events
 - Refine PH preparedness plans
- ▣ Partnership and collaboration
- ▣ Research
- ▣ Implement policy changes
 - Health in All Policies
- ▣ Funding for implementation of PH CAS
- ▣ Lead by example